

### **ABSTRACT**

Structures and methods for non-intrusive testing of communication signals exchanged between two circuit boards via an intermediate interconnect board. In one aspect hereof, test signals are exchanged between the two circuit boards without requiring active circuits on the interconnect board. In another aspect hereof, the functional signal normally exchanged between the circuits is latched during the exchange of test signals and the latched functional signal is utilized within the circuit that normally receives the functional signal to continue normal operations. In another aspect hereof, the test signals are exchanged over a dedicated test signal path between the two circuits. In another aspect hereof, the test signals are exchanged over the functional signal paths as out of band signals.